

NOTICE OF DRAFTSPERSON'S  
PATENT DRAWING REVIEWThe drawing(s) filed (insert date) 1-17-02 are:

A.  approved by the Draftsperson under 37 CFR 1.84 or 1.152.  
 B.  objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:  
 Black ink. Color.  
 \_\_\_\_\_ Color drawings are not acceptable until petition is granted.  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Pencil and non black ink not permitted. Fig(s) \_\_\_\_\_
2. PHOTOGRAPHS. 37 CFR 1.84(b)  
 \_\_\_\_\_ 1 full-tone set is required. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Photographs may not be mounted. 37 CFR 1.84(e)  
 \_\_\_\_\_ Poor quality (half-tone). Fig(s) \_\_\_\_\_
3. TYPE OF PAPER. 37 CFR 1.84(e)  
 \_\_\_\_\_ Paper not flexible, strong, white, and durable.  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Mylar, vellum paper is not acceptable (too thin). Fig(s) \_\_\_\_\_
4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:  
 \_\_\_\_\_ 21.0 cm by 29.7 cm (DIN size A4)  
 \_\_\_\_\_ 21.6 cm by 27.9 cm (8 1/2 x 11 inches)  
 \_\_\_\_\_ All drawing sheets not the same size.  
 Sheet(s) \_\_\_\_\_  
 \_\_\_\_\_ Drawings sheets not an acceptable size. Fig(s) \_\_\_\_\_
5. MARGINS. 37 CFR 1.84(g): Acceptable margins:  
 Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm  
 SIZE: A4 Size  
 Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm  
 SIZE: 8 1/2 x 11  
 Margins not acceptable. Fig(s) 3 4  
 \_\_\_\_\_ Top (T) 3 Left (L) 4  
 \_\_\_\_\_ Right (R) \_\_\_\_\_ Bottom (B) \_\_\_\_\_
6. VIEWS. 37 CFR 1.84(h)  
 REMINDER: Specification may require revision to correspond to drawing changes.  
 Partial views. 37 CFR 1.84(h)(2)  
 \_\_\_\_\_ Brackets needed to show figure as one entity.  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Views not labeled separately or properly.  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Enlarged view not labeled separately or properly.  
 Fig(s) \_\_\_\_\_
7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3)  
 \_\_\_\_\_ Hatching not indicated for sectional portions of an object.  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Sectional designation should be noted with Arabic or Roman numbers. Fig(s) \_\_\_\_\_
8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)  
 \_\_\_\_\_ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) \_\_\_\_\_
9. SCALE. 37 CFR 1.84(k)  
 \_\_\_\_\_ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction.  
 Fig(s) \_\_\_\_\_
10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(i)  
 \_\_\_\_\_ Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) 1 2 5
11. SHADING. 37 CFR 1.84(m)  
 \_\_\_\_\_ Solid black areas pale. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Solid black shading not permitted. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Shade lines, pale, rough and blurred. Fig(s) \_\_\_\_\_
12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)  
 \_\_\_\_\_ Numbers and reference characters not plain and legible. Fig(s) 4 2 5  
 \_\_\_\_\_ Figure legends are poor. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1)  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ English alphabet not used. 37 CFR 1.84(p)(2)  
 Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3)  
 Fig(s) 3
13. LEAD LINES. 37 CFR 1.84(q)  
 \_\_\_\_\_ Lead lines cross each other. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Lead lines missing. Fig(s) \_\_\_\_\_
14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t)  
 \_\_\_\_\_ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) \_\_\_\_\_
15. NUMBERING OF VIEWS. 37 CFR 1.84(u)  
 \_\_\_\_\_ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) \_\_\_\_\_
16. CORRECTIONS. 37 CFR 1.84(w)  
 \_\_\_\_\_ Corrections not made from prior PTO-948 dated \_\_\_\_\_
17. DESIGN DRAWINGS. 37 CFR 1.152  
 \_\_\_\_\_ Surface shading shown not appropriate. Fig(s) \_\_\_\_\_  
 \_\_\_\_\_ Solid black shading not used for color contrast. Fig(s) \_\_\_\_\_

## COMMENTS

REVIEWER J. CHASE DATE 7-10-02 TELEPHONE NO. 703 305-8430ATTACHMENT TO PAPER NO. 9

Attachment for PTO-948 (Rev. 03/01, or earlier)  
6/18/01

**The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.**

**INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

**2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

**Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.